AMENDMENTS TO THE CLAIMS

1. (Currently Amended) ~~A~~ The method of claim 52 ~~managing a computer database, comprising the steps of:~~ further comprising:

importing data into a database residing on a computer system;

constructing a schema object to represent a schema of the database; and

manipulating the database using ~~an~~ the aggregate classifier based on the schema object.

2. (Currently Amended) ~~A~~ The method of claim 52 ~~wherein said constructing step includes the steps of:~~ further comprising:

defining a plurality of classifier definitions corresponding to the schema of the database; and

mapping the classifier definitions to columns and tables in the database.

3. (Original) The method of claim 2 wherein said defining step defines a "property" classifier which interacts with a single column on a single table in the database.

4. (Original) The method of claim 3 wherein said defining step further defines an "object" classifier which contains one or more of the "property" classifiers.

5. (Original) The method of claim 3 wherein said defining step defines a "split-object" classifier which makes more than one "object" classifier appear as a single classifier.

6. (Original) The method of claim 5 wherein said defining step further defines a "join" classifier which identifies how multiple "object" classifiers database objects are linked in a "split-object" classifier.

7. (Original) The method of claim 5 wherein said defining step defines a "mapped property" classifier as a special form of the "split-object" classifier to manage data stored in a table of the database which serves as an index to another database table.

8. (Original) The method of claim 2 wherein said defining step defines a parameterized classifier which is a template for classifiers that are instantiated when associated parameters are provided.

9. (Original) The method of claim 1 further comprising the steps of:
modifying the schema of the database;
constructing a second schema object for the modified database; and
manipulating he modified database using the second schema object.

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10. (Original) The method of claim 9 wherein said step of constructing the second schema object includes the step of re-writing classification definitions stored on the computer system.

11. (Original) The method of claim 1 wherein constructing step includes the step of writing classification definitions stored on the computer system using a field-based language.

12. (Original) The method of claim 11 wherein said writing step uses XML.

13. (Original) The method of claim 1 wherein said constructing step includes the step of writing classification definitions stored on the computer system.

14. (Original) The method of claim 1 wherein said importing step parses an import file to import the data.

15. (Original) The method of claim 13 wherein said manipulating step includes the step of an application, residing on the computer system, interacting with a composite object included in the classification definitions.

16. (Original) The method of claim 1 wherein said manipulating step includes the step of generating a SQL SELECT query using the query generator.

17. (Original) The method of claim 1 wherein said manipulating step includes the step of generating a SQL INSERT query using the query generator.

18. (Original) The method of claim 1 wherein said manipulating step includes the step of generating a SQL UPDATE query using the query generator.

19. (Original) The method of claim 1 wherein said manipulating step includes the step of generating a SQL DELETE query using the query generator.

20. (Original) The method of claim 16 wherein said generating step includes the step of an aggregate classifier interrogating the schema object to determine how different classifiers correspond to columns and tables in the database.

21. (Currently Amended) ~~A~~ The computer system of claim 54 further comprising:

~~memory means storing a database, and storing~~ program instructions stored in the memory and adapted to construct ~~a~~ the schema object to represent ~~a~~ the schema of the database, and manipulate the database using ~~an~~ the aggregate classifier based on the schema object~~; and~~

~~means for processing the program instructions~~.

22. (Currently Amended) The computer system of claim ~~21~~ 54 wherein the program instructions define a plurality of classifiers corresponding to the schema of the database, and map the classifiers to tables in the database.

23. (Currently Amended) The computer system of claim ~~20~~ 22 wherein the program instructions further define a "property" classifier which interacts with a single column on a single table in the database.

24. (Original) The computer system of claim 23 wherein the program instructions further define an "object" classifier which contains one or more of the "property" classifiers.

25. (Original) The computer system of claim 22 wherein the program instructions further define a "split-object" classifier which makes more than one "object" classifier appear as a single classifier.

26. (Original) The computer system of claim 25 wherein the program instructions further define a "join" classifier which identifies how multiple "object" classifiers are linked in a "split-object" classifier.

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27. (Original) The computer system of claim 25 wherein the program instructions further define a "mapped property" classifier as a special form of the "split-object" classifier to manage data stored in a table of the database which serves as an index to another database table.

28. (Original) The computer system of claim 22 wherein the program instructions further define a parameterized classifier which is instantiated when associated parameters are provided.

29. (Original) The computer system of claim 21 wherein the program instructions construct a second schema object when a structure of the database is modified.

30. (Original) The computer system of claim 29 wherein the program instructions construct the second schema object by re-writing classification definitions stored in the memory means.

31. (Original) The computer system of claim 21 wherein the program instructions construct the schema object by writing classification definitions stored on the computer system using a field-based language.

32. (Original) The computer system of claim 21 wherein the program instructions generate a SQL SELECT query using the query generator.

33. (Currently Amended) The ~~method~~ computer system of claim 21 wherein said manipulating step includes the step of generating a SQL INSERT query using the query generator.

34. (Currently Amended) The ~~method~~ computer system of claim 21 wherein said manipulating step includes the step of generating a SQL UPDATE query using the query generator.

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35. (Currently Amended) The ~~method~~ computer system of claim 21 wherein said manipulating step includes the step of generating a SQL DELETE query using the query generator.

36. (Original) The computer system of claim 32 wherein the program instructions further direct an aggregate classifier to interrogate the schema object to determine how different classifiers correspond to columns and tables in the database.

37. (Original) The computer system of claim 21 wherein the program instructions construct a composite object to interact with an application program residing in said memory means.

38. (Currently Amended) ~~A~~ The computer program product of claim 56 further comprising:

~~a computer-readable storage medium; and~~

program instructions stored on said storage medium for constructing ~~the~~ schema object to represent ~~a~~ the schema of the database residing on a computer system, and manipulating the database using ~~an~~ the aggregate classifier based on the schema object.

39. (Currently Amended) The computer program product of claim ~~38~~ 56 wherein the program instructions define a plurality of classifiers corresponding to the schema of the database, and map the classifiers to tables in the database.

40. (Original) The computer program product of claim 39 wherein the program instructions further define a "property" classifier that interacts with only a single column on a single table in the database.

41. (Original) The computer program product of claim 40 wherein the program instructions further define an "object" classifier which contains one or more of the "property" classifiers.

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42. (Original) The computer program product of claim 39 wherein the program instructions further define a "split-object" classifier which makes more than one "object" classifier appear as a single classifier.

43. (Original) The computer program product of claim 42 wherein the program instructions further define a "join" classifier which identifies how multiple "object classifiers" are linked in a "split-object" classifier.

44. (Original) The computer program product of claim 42 wherein the program instructions further define a "mapped property" classifier as a special form of the "split-object" classifier to manage data stored in a table of the database which serves as an index to another database table.

45. (Original) The computer program product of claim 39 wherein the program instructions further define a parameterized classifier which is instantiated when associated parameters are provided.

46. (Original) The computer program product of claim 38 wherein the program instructions construct a second schema object when a structure of the database is modified.

47. (Original) The computer program product of claim 46 wherein the program instructions construct the second schema object by re-writing classification definitions stored on the computer system.

48. (Original) The computer program product of claim 38 wherein the program instructions construct the schema object by writing classification definitions stored on the computer system using a field-based language.

49. (Original) The computer program product of claim 38 wherein the program instructions generate a search query using the schema object.

50. (Original) The computer program product of claim 49 wherein the program instructions further direct an aggregate classifier to interrogate the schema object to determine locations of different classifiers in the database.

51. (Original) The computer program product of claim 38 wherein the program instructions construct a composite object to interact with an application program residing on the computer system.

52. (New) A method allowing application programs to access a database through an interface, wherein the interface includes knowledge of a schema of the database, the method comprising:

receiving a request to the interface from one of the application programs to access the database;

providing to the requesting application an aggregate classifier based on classifier definitions of a schema object, wherein the schema object includes a representation of a schema of the database;

receiving one or more requests from the requesting application;

interrogating the schema object for location information of classifiers of the database;

providing the location information of the classifiers to the requesting application;

associating search constraints from a request of the requesting application with locations in the database; and

generating a query to the database based on the search constraints.

53. (New) The method of claim 52 further comprising:
returning results of the query to the requesting application.

54. (New) A computer system comprising:
a memory storing a database and storing program instructions that allow application programs to access the database through an interface, wherein the interface includes knowledge of a schema of the database, the program instructions being executable to:
receive a request to the interface from one of the application programs to access the database;
provide to the requesting application an aggregate classifier based on classifier definitions of a schema object, wherein the schema object includes a representation of a schema of the database;
receive one or more requests from the requesting application;
interrogate the schema object for location information of classifiers of the database;
provide the location information of the classifiers to the requesting application;
associate search constraints from a request of the requesting application with locations in the database; and
generate a query to the database based on the search constraints; and
a processor coupled to the memory to process the instructions.

55. (New) The computer system of claim 54 wherein the program instructions further comprise instructions to returning results of the query to the requesting application.

56. (New) A computer program product comprising:
a computer readable storage medium storing program instructions for allowing application programs to access a database through an interface, wherein the interface includes knowledge of a schema of the database, the program instructions being executable to:

receive a request to the interface from one of the application programs to access the database;

provide to the requesting application an aggregate classifier based on classifier definitions of a schema object, wherein the schema object includes a representation of a schema of the database;

receive one or more requests from the requesting application;

interrogate the schema object for location information of classifiers of the database;

provide the location information of the classifiers to the requesting application;

associate search constraints from a request of the requesting application with locations in the database; and

generate a query to the database based on the search constraints.

57. (New) The computer system of claim 56 wherein the program instructions further comprise instructions to returning results of the query to the requesting application.